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Application Serial No.: 10/658700
For the Office Action Dated: December 29, 2006

IN THE CLAIMS

Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An imaging device chip set comprising:
 - an imaging chip provided for obtaining an electric signal by photoelectric conversion of incident light; and
 - a DSP chip provided for carrying out digital signal processing with respect to the electric signal obtained by the imaging chip,wherein
the imaging chip includes:
 - a plurality of unit pixels for generating the electric signal by the photoelectric conversion of incident light;
 - a horizontal scanning circuit for selecting the unit pixels in a horizontal direction; and
 - a vertical scanning circuit for selecting the unit pixels in a vertical direction,the DSP chip includes:
 - a timing generating circuit for generating timing pulses necessary for operations of the horizontal scanning circuit and the vertical scanning circuit; and
 - a digital signal processing circuit for carrying out digital signal processing with respect to the electric signal generated by the plurality of unit pixels,the timing generating circuit and the digital signal processing circuit, which are included in the DSP chip, are formed with CMOS transistors, and
the plurality of unit pixels, the horizontal scanning circuit, and the vertical scanning circuit, which are included in the imaging chip, are formed with transistors of a same conductivity type, at least a part of the horizontal scanning circuit and vertical

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scanning circuit included being formed with dynamic shift register circuits composed of the transistors of the same conductivity type and capacitors.

2. (Original) The imaging device chip set according to claim 1, wherein the plurality of unit pixels, the horizontal scanning circuit, and the vertical scanning circuit, which are included in the imaging chip, are formed with n-MOS transistors.

3. (Original) The imaging device chip set according to claim 1, wherein the transistors of the same conductivity type that form the plurality of unit pixels, the horizontal scanning circuit, and the vertical scanning circuit, which are included in the imaging chip, are formed according to a minimum dimension greater than a minimum dimension for forming the CMOS transistors that form the timing generating circuit and the digital signal processing circuit included in the DSP chip.

4. (Cancelled)

5. (Original) The imaging device chip set according to claim 1, wherein the imaging chip further includes:

an amplifier circuit for amplifying the electric signal generated by the plurality of unit pixels; and

an analog-digital converting circuit for converting the electric signal amplified by the amplifier circuit into a digital signal and feeding the digital signal to the digital signal processing circuit included in the DSP chip.

6. (Currently Amended) The imaging device chip set according to claim 4, wherein the plurality of transistors forming the dynamic shift register ~~logic~~ circuits are isolated from one another with thick oxide films formed on a substrate.

7. (Currently Amended) The imaging device chip set according to claim 4, wherein the plurality of transistors forming the dynamic shift register ~~logic~~ circuits are isolated from one another with ion-implanted layers, the ion-implanted layers being formed so as

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to be exposed on a surface of a substrate.

8. (Original) The imaging device chip set according to claim 1, wherein each of the unit pixels included in the imaging chip includes an embedded-type photodiode that is formed so as to be exposed on a surface of a substrate.

9. (Original) An image pickup system comprising:
the imaging device chip set according to claim 1;
a memory that stores function information for executing functions including an electronic shutter and an automatic diaphragm; and
a controller for reading out the function information stored in the memory, and feeding the function information to the DSP chip provided in the imaging device chip set.